

Application No.: 10/802,138
Docket No.: UC0403USNA

AUG 10 2007

Listing of Claims

1. (Currently Amended) An aqueous dispersion comprising:
water,
a polydioxothiophene,
a colloid-forming polymeric acid, and
a water-miscible organic liquid,

wherein the organic liquid is added in an amount to increase the conductivity and the weight ratio of organic liquid to total polymer is at least 0.4 in a range of from about 0.3 to 5.0.

2. (Original) The aqueous dispersion of Claim 1, wherein the dispersion has a pH in the range of from about 1 to 8 and further comprises at least one selected from a conductive polymer, metal particles, graphite fibers, graphite particles, carbon nanotubes, carbon nanoparticles, metal nanowires, organic conductive inks, organic conductive pastes, inorganic conductive inks, inorganic conductive pastes, charge transport materials, semiconductive inorganic oxide nano-particles, insulating inorganic oxide nano-particles, piezoelectric oxide nano-particles, piezoelectric polymers, pyroelectric oxide nano-particles, pyroelectric polymers, ferroelectric oxide nano-particles, ferroelectric polymers, dispersing agents, crosslinking agents and combinations thereof.

3. (Canceled)

4. The aqueous dispersion of Claim 1, wherein at least one organic liquid has a boiling point greater than 100°C.

5. The aqueous dispersion of Claim 1, wherein the organic liquid is selected from N-methylpyrrolidone, ethylene glycol, dimethylacetamide, dimethyl formamide, dimethylsulfoxide, and combinations thereof.

6. The aqueous dispersion of Claim 1, wherein the organic liquid comprises diethylene glycol.

7. The aqueous dispersion of Claim 1, wherein the organic liquid comprises N-methylpyrrolidone.

8. The aqueous dispersion of Claim 1, wherein the polydioxothiophene comprises poly(3,4-ethylenedioxothiophene).

9. The aqueous dispersion of Claim 1, wherein the colloid-forming polymeric acid comprises a perfluoroalkylenesulfonic acid.

10. (Canceled)

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11. (Canceled)
12. (Canceled)
13. (Canceled)
14. (Canceled)
15. (Canceled)
16. (Canceled)
17. (Canceled)
18. (Currently Amended) The aqueous dispersion of Claim [[1]] 5, wherein the organic liquid has a boiling point greater than 100°C.
19. (Currently Amended) The aqueous dispersion of Claim [[1]] 9, wherein the organic liquid is selected from N-methylpyrrolidone, ethylene glycol, diethylene glycol, dimethylacetamide, dimethyl formamide, dimethylsulfoxide, and combinations thereof.
20. (Currently Amended) The device aqueous dispersion of Claim [[1]] 8, wherein composition the colloid-forming polymeric acid comprises a perfluoroalkylenesulfonic acid.
21. (Canceled)
22. (Canceled)
23. (Canceled)